

## Features

- Low Smoke Zero Halogen Design
- RoHS compliant insulation and jacket
- Thermoset insulation for enhanced thermal stability
- Specially formulated insulation for exceptional long term water resistance
- Superior flame retardance
- Excellent mechanical properties
- Tin-coated copper conductors for improved terminations and corrosion resistance
- Reduced size and weight for increased raceway capacity
- Easy strippability
- Low friction jacket for reduced pulling tension

## Scope

Firewall® LSZH is a totally low smoke, zero halogen cable comprised of both thermoset insulation and jacket material. It provides superior resistance to fire and moisture. It may be installed in wet and dry locations, indoors and outdoors, in metal trays, conduits, ducts, or in direct burial applications. It is ideal for applications in transit systems and tunnels to perform a variety of control and related functions.

## Performance Standards

- Insulation in accordance with ICEA and UL standards
- Insulated conductors are UL Listed Type RFHH-2
- UL listed type TC (UL 1277) in accordance with NEC
- Passes IEEE 1202/FT4 vertical tray flame test and ICEA 70,000 BTU/hr vertical tray flame test (T-30-520)
- Single conductors pass vertical flame test Type A as defined in ICEA S-95-658 (6.8.2)
- UL listed Type LS (limited smoke) per UL 1277 and UL 1685
- UL approved 90°C for both wet and dry locations
- Jacket exceeds requirements for UL class XL/90°C and ICEA publication T-33-655, Type II
- UL listed for sunlight resistance
- UL listed as gasoline and oil resistance
- Meets the requirements of NFPA 130 & 502

## Construction

**Conductor:** Annealed, tin-coated copper, class "B" strand (ASTM B-8 & B-33)

**Insulation:** Flame retardant low Smoke Zero Halogen crosslinked polyolefin

**Circuit Identification:** Printed numbers per ICEA Method 4. (Alt. colors available upon request)

**Fillers:** (Where required)

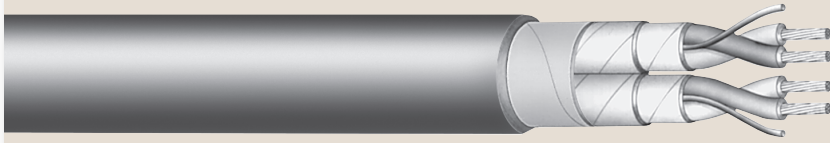
**Shield system:** Helicly applied aluminum/polyester laminated tape shield in continuous contact with flexible strand tin-coated copper drain wire

**Binder tape:** Helicly applied polyester

**Jacket:** Reduced wall, black, flame retardant crosslinked low smoke zero halogen polyolefin

\*Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.

# Firewall® LSZH Instrumentation Cable



Multi-Shielded Pairs  
Without Overall Shield  
NFPA 130 & 502  
90°C\*, 600 Volt  
NEC Type TC  
UL Listed

## 16 AWG, 7 Strand

Product Code	Number of Pairs	Insulation Thickness		Insulated Cond. Diameter		Nominal OD		Approximate Cable Weight	
		(Inch)	(mm)	(Inch)	(mm)	(Inch)	(mm)	(lbs/kft)	(kg/km)
I02-1601	1	.030	0.76	.120	3.00	.310	7.87	52	77.38
I02-1602	2	.030	0.76	.120	3.00	.544	13.82	122	181.56
I02-1603	3	.030	0.76	.120	3.00	.579	14.71	163	242.57
I02-1604	4	.030	0.76	.120	3.00	.637	16.18	206	306.56
I02-1605	5	.030	0.76	.120	3.00	.701	17.81	250	372.04
I02-1607	7	.030	0.76	.120	3.00	.769	19.53	332	494.07
I02-1608	8	.030	0.76	.120	3.00	.880	22.35	412	613.12
I02-1609	9	.030	0.76	.120	3.00	.949	24.10	459	683.07
I02-1612	12	.030	0.76	.120	3.00	1.069	27.15	589	876.53
I02-1615	15	.030	0.76	.120	3.00	1.192	30.28	719	1069.99
I02-1619	19	.030	0.76	.120	3.00	1.259	31.98	879	1308.10
I02-1637	37	.030	0.76	.120	3.00	1.770	44.96	1730	2574.52

## 18 AWG, 7 Strand

Product Code	Number of Pairs	Insulation Thickness		Insulated Cond. Diameter		Nominal OD		Approximate Cable Weight	
		(Inch)	(mm)	(Inch)	(mm)	(Inch)	(mm)	(lbs/kft)	(kg/km)
I02-1801	1	.030	0.76	.110	2.69	.290	7.37	42	62.50
I02-1802	2	.030	0.76	.110	2.69	.481	12.22	88	130.96
I02-1803	3	.030	0.76	.110	2.69	.533	13.54	128	190.49
I02-1804	4	.030	0.76	.110	2.69	.586	14.88	160	238.11
I02-1805	5	.030	0.76	.110	2.69	.644	16.36	193	287.22
I02-1807	7	.030	0.76	.110	2.69	.705	17.91	254	377.99
I02-1808	8	.030	0.76	.110	2.69	.768	19.51	287	427.10
I02-1809	9	.030	0.76	.110	2.69	.872	22.15	356	529.79
I02-1812	12	.030	0.76	.110	2.69	.981	24.92	453	674.14
I02-1815	15	.030	0.76	.110	2.69	1.092	27.74	551	819.98
I02-1819	19	.030	0.76	.110	2.69	1.153	29.29	669	995.58
I02-1837	37	.030	0.76	.110	2.69	1.560	39.62	1221	1817.05

\* Rated 90°C for normal operation in wet and dry locations, 130°C for emergency overload conditions, and 250°C for short circuit conditions.



Marmon Engineered Wire & Cable LLC  
A Berkshire Hathaway Company